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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,111

09/20/2006

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EXAMINER

THROWER, LARRY W

ART UNIT

PAPER NUMBER

4111

MAIL DATE

DELIVERY MODE

06/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,111	Applicant(s) FUKASAWA ET AL.	
	Examiner LARRY THROWER	Art Unit 4111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/20/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-2 and 4 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The term "low-pressure" in claim 1 is a relative term which renders the claim indefinite. The term "low-pressure" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
4. The term "low-temperature" in claim 2 is a relative term which renders the claim indefinite. The term "low-temperature" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
5. Claim 4 recites the limitation "the fluids." There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Arimatsu (JP-61084211A).

- Regarding claim 1, Arimatsu teaches a method of vulcanization-molding a rubber material (title) by heating a vulcanization mold and pushing the rubber material onto a shaping face of the mold (fig. 1) through a pressure supplied to an interior of the mold (page 4, upper right, first paragraph), wherein a low-pressure fluid is supplied to the interior of the mold at an initial stage of the vulcanization molding and thereafter the pressure of the fluid is increased stepwise (fig. 6; page 4, upper right, first paragraph).
- Regarding claim 2, Arimatsu discloses a low-temperature fluid being supplied to the interior of the vulcanization mold at the initial stage of the vulcanization molding and thereafter the temperature of the fluid is increased stepwise (page 3, lower right, second paragraph).
- Regarding claim 3, Arimatsu discloses two fluids having different pressures and temperatures being selectively supplied to the interior of the vulcanization mold (page 2, upper right, third paragraph).
- Regarding claim 4, Arimatsu teaches after the supply of the fluids to the interior of the vulcanization mold, an inert gas having a pressure higher than the two fluids is supplied to the mold (page 2, lower right, second paragraph).
- Regarding claim 5, Arimatsu discloses the fluid being steam (page 3, upper right, second paragraph).

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- Regarding claim 6, Arimatsu teaches a time at the initial stage of the vulcanization molding being within a range of 3 minutes and a pressure of a steam supplied to the vulcanization mold in such a time is 10 kg/cm² (0.98 MPa).

8. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Ono (U.S. Patent Publication No. 2001/0054782).

- Regarding claim 1, Ono teaches a method of vulcanization-molding a rubber material a method of vulcanization-molding a rubber material (title; ¶ 18) by heating a vulcanization mold and pushing the rubber material onto a shaping face of the mold (fig. 3) through a pressure supplied to an interior of the mold (¶ 20), wherein a low-pressure fluid is supplied to the interior of the mold at an initial stage (fig. 2, “P1U”) of the vulcanization molding and thereafter the pressure of the fluid is increased stepless (fig. 2, “P2U”; ¶ 34).
- Regarding claim 5, Ono discloses the fluid being steam (¶ 21).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LARRY THROWER whose telephone number is (571)270-5517. The examiner can normally be reached on Monday through Thursday from 7:30AM-5PM est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sam C. Yao can be reached on 571-272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Larry Thrower/
Examiner, Art Unit 4111

/Sam Chuan C. Yao/
Supervisory Patent Examiner, Art Unit 4111